

What is claim d is:

1. A magnetic head slider, comprising:

a recording element for recording information on a magnetic disk;

5 a reproducing element for reproducing information from the magnetic disk;

a slider for mounting thereon said recording element and said reproducing element, disposed opposing the magnetic disk, to be used; and

10 a heat generating portion provided on said slider, for thermally expanding a vicinity of at least said reproducing element, wherein

said heat generating portion and said reproducing element are disposed, so that an end portion of said slider on a surface
15 side opposing to the magnetic disk, in said heat generating portion, is located deeper than an end portion of said slider on a surface side opposing to the magnetic disk, in said reproducing element, at least.

2. A magnetic head slider, as described in the claim 1,
20 wherein said recording element and said reproducing element are constructed to be a single element.

3. A magnetic head slider, as described in the claim 1, wherein said recording element and said reproducing element are formed through laminating thin-films on a substrate, being disposed
25 so that said heat generating portion locates on said substrate side with respect to said recording element and said reproducing element, in a normal direction of the substrate, i.e., in a direction of laminating the thin-films, and having a metal film(s) on one side or on both sides of said heat generating portion relating

to said thin-film laminating direction, to be thermally expanded by means of said heat generating portion.

4. A magnetic head slider, as described in the claim 1, wherein said recording element and said reproducing element are
5 formed through laminating thin-films on a substrate, being disposed so that said heat generating portion locates on said substrate side with respect to said recording element and said reproducing element, in a normal direction of the substrate, i.e., in a direction of laminating the thin-films, and being provided with a layer made
10 of a resin material between said heat generating portion and said substrate relating to said thin-film laminating direction.

5. A magnetic head slider, as described in the claim 1, wherein a distance between said heat generating portion and the surface of said slider opposing to the magnetic disk is equal to
15 or greater than 10 μm and is equal to or less than 50 μm .

6. A magnetic head slider, as described in the claim 1, wherein said reproducing element is one, using a magneto-resistive element therein, and a distance between said heat generating portion and the surface of said slider opposing to the magnetic
20 disk is as equal to or greater than 60 times and equal to or less than 300 times as a size of said magneto-resistive element in a normal direction of the surface of said slider opposing to the magnetic disk.

7. A magnetic head slider, as described in the claim 6,
25 wherein the surface of said slider opposing to the magnetic disk builds up an air-bearing surface.

8. A magnetic head slider, as described in the claim 1, wherein said heat generating portion is made of a metal thin-film resistor, having a resistance value being equal to or greater than
30 20 Ω and equal to or less than 125 Ω .

9. A magnetic disk device, comprising:

a magnetic disk;

a recording element for recording information on a magnetic disk;

5 a reproducing element for reproducing information from the magnetic disk;

a slider for mounting thereon said recording element and said reproducing element, disposed opposing the magnetic disk, to be used; and

10 a heat generating portion provided on said slider, for thermally expanding a vicinity of at least said reproducing element, wherein

15 said heat generating portion and said reproducing element are disposed, so that an end portion of said slider on a surface side opposing to the magnetic disk, in said heat generating portion, is located deeper than an end portion of said slider on a surface side opposing to the magnetic disk, in said reproducing element, at least.